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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,117	09/19/2003	Kan Takaiwa	1232-5158	8423

27123 7590 08/27/2008

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EXAMINER	
JERABEK, KELLY L	
ART UNIT	**PAPER NUMBER**
2622	

NOTIFICATION DATE	DELIVERY MODE
08/27/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/666,117	TAKAIWA ET AL.	
	Examiner	Art Unit	
	KELLY L. JERABEK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6,7 and 10-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6,7 and 10-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 6-7 and 9-15 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 4/22/2008 and 6/4/2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-7 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terane et al. US 6,734,909 in view of Tsutsui US 6,674,472 and further in view of Matsumoto et al. US 2003/0123696.

Re claim 6, Terane discloses an image pickup apparatus (1) comprising: an image pickup unit (CCD 22) which obtains original image data (figure 3, col. 5, lines 44-60); an image processing unit (imaging circuit 24) which generates first reduced image data (Full Image – fig. 2A) and thumbnail data (thumbnail data - fig. 2B, 2C) from original image data, wherein the first reduced image data (Full Image – fig. 2A) is larger than the thumbnail data (thumbnail data - figs. 2B, 2C) (col. 4, line 54-col. 5, line 32; figures 2A-2C); an image file generation unit which generates an image file including the original image data and thumbnail data, and stores the generated image file in a removable memory (col. 6, lines 15-24); a display unit (7) which displays thumbnail data (thumbnail data - figs. 2B, 2C) and a control unit which controls said display unit (7), in response to an instruction of enlarging first reduced image data (Full Image- Figure 2A) displayed by the display unit (7) so as to display second reduced image data (thumbnail data - figures 2B, 2C) instead of the first reduced image data (Full Image- Figure 2A) (col. 4, line 54-col. 5, line 32; col. 7, lines 27-34; figures 2A-2C). However, although the Terane reference discloses all of the above limitations it fails to specifically state that thumbnail images of different image sizes may be generated and displayed.

Tsutsui discloses a digital camera that includes an image processing unit (CPU 13) which generates second reduced image data (standard image data corresponding

to full screen image), first reduced image data (fig. 9A, corresponding to image size when four thumbnail images are displayed) and thumbnail data (fig. 9B, corresponding to image size when nine thumbnail images are displayed), wherein the second reduced image data (standard image data corresponding to full screen image) is larger than the first reduced image data (fig. 9A, corresponding to image size when four thumbnail images are displayed) and the first image data (fig. 9A, corresponding to image size when four thumbnail images are displayed) is larger than the thumbnail data (fig. 9B, corresponding to image size when nine thumbnail images are displayed) (col. 4, lines 19-54, col. 9, lines 6-65). Tsutsui also discloses an image file generation unit (CPU 13) which generates image data and thumbnail images and stores the image data and thumbnail images into a memory card (9) (col. 4, lines 19-62; col. 5, lines 12-44; figures 3 and 5) and a display unit which displays the first reduced image data (fig. 9A, corresponding to image size when four thumbnail images are displayed) and the second reduced image data (standard image data corresponding to full screen image) (col. 9, lines 6-65; figures 9A, 9B). Therefore, it would have been obvious for one skilled in the art to have been motivated to generate and display thumbnail images of different image sizes as disclosed by Tsutsui and include thumbnail images of different image sizes in the digital camera including first reduced image data and thumbnail images disclosed by Terane. Doing so would provide a means for allowing a user of a digital camera to quickly review multiple captured images of different image sizes on the display of the camera. The combination of the Terane and Tsutsui references discloses all of the above limitations including generating original image data, first reduced image data,

second reduced image data and thumbnail data. However neither reference specifically discloses a file generation unit that generates an image file by storing the original image data, first reduced image data corresponding to the original image data, second reduced image data corresponding to the original image data and thumbnail data of the original image data into one image file.

Matsumoto discloses an image processing method which generates plural image data of mutually different resolution levels. Matsumoto discloses an image processing unit which generates first reduced image data (corresponding to resolution 1), second reduced image data (corresponding to resolution 0) for enlargement display processing of enlarging and displaying a part of the first reduced image data (corresponding to resolution 0) and thumbnail data (corresponding to resolution n, minimum resolution) from the original image data, wherein the second reduced image data (corresponding to resolution 0) is larger than the first reduced image data (corresponding to resolution 1) and the first reduced image data (corresponding to resolution 1) is larger than the thumbnail data (corresponding to resolution n, minimum resolution) (page 3, paragraphs 72-85; figures 3-6). Matsumoto further discloses an image file generation unit which generates an image file by storing the original image data, the first reduced image data (corresponding to resolution 1) corresponding to the original image data, the second reduced image data (corresponding to resolution 0) corresponding to the original image data and the thumbnail data (corresponding to resolution n, minimum resolution) of the original image data, into one image file (plural images of different resolution levels are stored into a single image file) (page 3, paragraphs 72-85; figures 3-6) and an interface

unit which writes the image file generated by the image file generation means in a recording medium (removable disk 75) and reads out the image file from the recording medium (removable disk 75) (page 4, paragraphs 88-96). Therefore, it would have been obvious for one skilled in the art to have been motivated to generate and store plural images of different resolution levels into one image file as disclosed by Matsumoto in the digital camera including first reduced image data, second reduced image data and thumbnail images disclosed by the combination of the Terane and Tsutsui references. Doing so would provide a means for allowing a user of a digital camera to quickly review multiple captured images having different resolution levels that have been previously stored into a single image file.

Re claim 7, Tsutsui states that a camera image processing unit compresses original image data and reduced image data (thumbnail image data) in accordance with the same image compressing method (col. 5, lines 24-44).

Re claim 9, Tsutsui states that a camera image processing unit compresses original image data and reduced image data (thumbnail image data) in accordance with the same image compressing method (col. 5, lines 24-44). Therefore, it can be seen that first reduced image data (original image data) and second reduced image data (fig. 9A, corresponding to image size when four thumbnail images are displayed) are compressed in accordance with the same image compressing method.

Re claim 10, Terane discloses a plurality of image display modes (display of Full Image - Figure 2A and thumbnail data - figs. 2B, 2C on the display unit 7) (col. 4, line 54-col. 5, line 32; figures 2A-2C). Additionally, Terane states that if a zoom button (13) is pressed a zoom operation of a displayed full image is performed (col. 7, lines 27-34). Therefore, it can be seen that Terane discloses that a control unit is capable of starting an enlargement display process even if any of a plurality of image display modes is selected.

Re claim 11, Terane discloses that the plurality of image display modes include an image display mode for displaying one image (display of Full Image - Figure 2A) stored in a removable memory on the display unit (7) (col. 4, line 54-col. 5, line 23; fig. 2A).

Re claim 12, Tsutsui discloses that the plurality of image display modes include an image display mode for displaying four images (fig. 9A, four thumbnail images are displayed) stored in a removable memory on a display unit (col. 9, lines 6-65; fig. 9A).

Re claim 13, Terane discloses that the plurality of image display modes include an image display mode for displaying nine images (display of thumbnail images - Figure 2C) stored in a removable memory on the display unit (7) (col. 5, lines 24-35; fig. 2C).

In addition, Tsutsui discloses that the plurality of image display modes include an image display mode for displaying nine images (fig. 9B, nine thumbnail images are displayed) stored in a removable memory on a display unit (col. 9, lines 6-65; fig. 9B).

Re claim 14, Terane discloses that the plurality of image display modes include an image display mode for displaying one image stored in the removable memory and information (scene number displayed on top right of image) relating to the image on the display unit (7) (figures 2A-2B).

Re claim 15, Terane discloses that the image pickup apparatus is a digital camera (1) (col. 5, lines 36-43).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached at **(571) 272-7372**. The fax phone number for submitting all Official communications is (**571) 273-7300**. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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